

CLAIMS:

1. A pharmaceutical composition comprising M3 protein as encoded by virus MHV 68, or a homologue of said M3 protein, for use in binding to a chemokine or a chemokine analogue in vivo, or in blocking binding of a chemokine to a corresponding cell surface receptor in vivo, to produce an immunomodulatory effect.
2. A composition according to claim 1, for use in producing an anti-inflammatory effect.
3. A pharmaceutical composition comprising M3 protein as encoded by virus MHV 68 or a homologue of said M3 protein, for use in binding to a chemokine analogue present in a virus or parasite to reduce or block entry of said virus or parasite into cells.
4. A pharmaceutical composition comprising (a) M3 protein as encoded by virus MHV 68 or a homologue of said M3 protein and (b) an additional immunosuppressant or anti-inflammatory substance.
5. A test kit comprising M3 protein or a homologue thereof and a labelled or immobilised reactant, for detecting or measuring a chemokine, chemokine analogue, or chemokine receptor in vitro.
6. A test kit according to claim 5, comprising said M3 protein or a homologue thereof labelled with a detectable label.
7. A test kit according to claim 5, wherein said M3 protein or homologue thereof is immobilised on a solid support.
8. A composition comprising a polypeptide homologue of M3 protein (other than M3 protein itself) which can bind to a chemokine or chemokine analogue.
9. A composition according to claim 8, comprising a coupling product of M3 protein or homologue thereof with another substance, or a fusion protein comprising an M3 polypeptide sequence or homologue thereof fused to a polypeptide sequence of other origin.
10. A composition according to claim 8 or 9, wherein said M3 protein or homologue thereof is coupled to a detectable label.
11. A polynucleotide having a sequence encoding either (a) a homologue of M3, or (b) a fusion polypeptide comprising M3 protein or a homologue thereof, fused to a polypeptide sequence of other origin.

12. A polynucleotide according to claim 11, comprising an expression cassette wherein said sequence encoding (a) or (b) is operably associated with a tissue specific or a constitutive promoter.
13. A polynucleotide according to claim 11 or 12, wherein said sequence
5 encoding (a) or (b) forms part of a viral vector or an expression plasmid.
14. A method of treatment to produce an anti-inflammatory effect which comprises administering to a subject to be treated a pharmaceutical composition comprising M3 protein as encoded by virus MHV 68, or a homologue of said protein, or comprising an expression vector encoding and capable of expressing said protein or protein homologue.
- 10 15. A method of treatment to reduce or block entry of a virus or parasite into cells of a subject infected with said virus or parasite, which comprises administering a pharmaceutical composition comprising M3 protein as encoded by virus MHV 68, or a homologue of said protein, or an expression vector expressing said protein or protein homologue, to said subject to bind to a chemokine analogue present in said virus or
15 parasite. ✓
16. A method of detecting a substance that comprises a chemokine or chemokine analogue, which comprises contacting a sample possibly comprising said substance to be tested with a reagent comprising M3 protein as encoded by virus MHV 68, or a homologue of said M3 protein, thereby to bind said chemokine or chemokine analogue.

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